KBA16

Thank you for purchasing the Kustom KBA16 model bass guitar amplifier. Kustom has listened to musicians throughout the world and stands proudly behind each and every one we make. It was designed with your needs in mind. Flexible, feature laden, great sounding, able to adapt to all kinds of music, this amplifier really delivers what you have been looking and waiting for. Whatever style you choose, it's ready!. Kustom, with a 30 year tradition of excellence in design, proudly delivers to you this amp and rewards you with a rugged and dependable amp designed and engineered in the USA. Again, thank you for your purchase. Please take a few minutes to learn about all the professional features that are built in.

SPECIFICATIONS									
Model	Power	Equalizer	Channels	Impedance	Effects	Amplifier Type	Dimensions	Weight	
KBA16	16 W	4 Band	One	8 Ohms	N/A	Bi-Polar Transistor	13"x15.76"x10" 33x40x25.5cm.	22 lbs. 9.59 kg.	

DANGER

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY TO NOISE INDUCED HEARING LOSS BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME.

THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES:

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DURATION PER DAY IN HOU	RS
8	
6	
4	
3	
2	
1	
1/2 HR. or LESS	

SOUND LEVEL db FLOW RESPONSE
90
93
95
97
100
103
110

ACCORDING TO OSHA, ANY EXPOSURE IN THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS. EAR PLUGS OR PROTECTORS IN THE EAR CANAL OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS. IF EXPOSURE IN EXCESS OF THE LIMITS AS PUT FORTH ABOVE, TO INSURE AGAINST POTENTIALLY HARMFUL EXPOSURE TO HIGH SOUND PRESSURE LEVELS. IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF INDUCING HIGH SOUND PRESSURE LEVELS, SUCH AS THIS AMPLIFICATION SYSTEM, BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

WARNING!

- THIS APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. NO OBJECTS FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON THE APPARATUS.
- TO AVOID ELECTRICAL SHOCK, DO NOT DISASSEMBLE. REFER SERVICING TO QUALIFIED PERSONAL ONLY!



AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSITUTE A RISK OF ELECTRIC SHOCK TO PERSONS



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE UNIT.

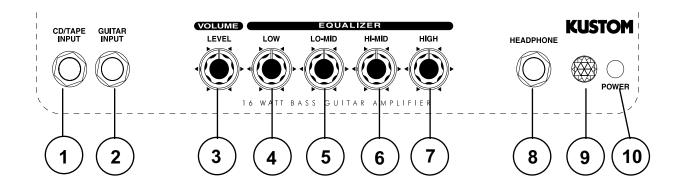
IMPORTANT

- 1. Read all safety and operating instructions before using this product.
- 2. All safety and operating instructions should be kept for future reference.
- 3. Obey all cautions in the operating instructions and on the back of the unit.
- 4. All operating instructions should be followed.
- This product should not be used near water i.e. bathtub, sink, swimming pool, wet basement, etc.
- This product should be located so that its position does not interfere with proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
- 7. This product should not be placed near a source of heat, such as a stove, radiator, or another heat producing amplifier.
- Connect only to a power supply of the type indicated on the back of the amplifier near the power supply cord.
- 9. Do not break off the ground pin of the power supply cord.
- 10. Power supply cords should always handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the point where the cord exits the unit.
- 11. The power supply cord should be unplugged when the unit is unused for long periods of time.
- 12. If this product is to be mounted in an equipment rack, rear support should be provided.
- 13. Metal parts and vinyl covering may be cleaned with a damp rag.
- 14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
- 15. This unit should be checked by a qualified service technician if:
 - A. The power supply cord or plug has been damaged.
 - B. Anything has fallen or been spilled into the unit.
 - C. The unit does not operate correctly.
 - D. The unit has been dropped or the enclosure damaged.
- 16. The user should not attempt to service this equipment. All service work must be done by a qualified service technician for warranty repairs.

CAUTION

THIS AMPLIFIER HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE POWER RESERVE FOR PLAYING MODERN MUSIC WHICH MAY REQUIRE OCCASIONAL PEAK POWER. EXTENDED OPERATION AT ABSOLUTE MAXIMUM POWER IS NOT RECOMMENDED SINCE THIS COULD DAMAGE THE ASSOCIATED LOUDSPEAKER SYSTEM. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE MASTER VOLUME CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.



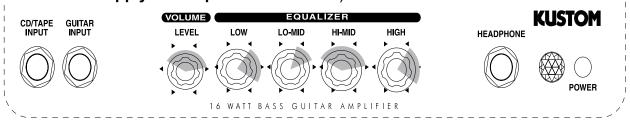


- 1.) CD/Tape Input this 1/4" 3 conductor jack will allow you to plug in a CD player, tape or any other source to practice along with. It sums the left and right signals into a mono signal and passes it through to the amplifier section. To control the volume of the source, adjust the output volume of the device. We suggest you turn the volume all the way down then plug in and adjust the volume according to your taste.
- **2.) Guitar Input -** this is a 1/4" 2 conductor input jack for plugging in your instrument. It is intended for bass guitar or Hi-Z microphones but will accept other instruments as well.
- **3.) Volume Level** this control is the output volume control for the bass guitar input. Slowly increase the control to increase the volume. If you are using a bass guitar with an on-board preamp, set it's level for a mid position before increasing this control otherwise distortion may occur.
- **4.)** Low this control is the bass control. It is active and set to boost or cut frequencies at 100 Hz. This will effect the low frequency signals. Turning it fully clockwise, the signal is boosted 12 db. Turning it counterclockwise, the low will be rolled off -12db. Especially good for making low output, thin toned bass guitars sound fuller.
- 5.) Lo Mid this control is the Low Midrange control. It is active and set to boost or cut frequencies at 500 Hz. This will effect the mid-low frequency signals. Turning it fully clockwise, the signal is boosted 12 db. Turning it counterclockwise, the low-mids will be rolled off -12db. Especially good for "cleaning up" muddy bass guitar overtones.
- 6.) Hi Mid this control is the High Midrange control. It is active and set to boost or cut frequencies at 2KHz. This will effect the mid-high frequency signals. Turning it fully clockwise, the signal is boosted 12 db. Turning it counterclockwise, the low-mids will be rolled off -12db. Increasing this will add punch to a bass guitars' sound.
- **7.) High -** this is the high frequency control. It is active and set to boost or cut frequencies at 10KHz. This will effect the high frequency signals. Turning it fully clockwise, the signal is boosted 12 db. Turning it counterclockwise, the highs will be rolled off -12db. This will add or subtract the high end attack of slapping style sounds or pick attack and clarity.
- **8.) Headphone Jack -** this is a 1/4" 3 conductor jack for plugging headphones. It will sum the signal and put the sound in both ears, thereby creating a pseudo-stereo sound. Volume will be determined by the volume control on the channel you are on. It will disconnect the internal speaker when plugged in. This will allow quiet practicing.
- **9.) Jewel Light -** this jewel light lets you know that the amplifier is on.
- **10.) Power -** this switch turns on and off the AC power to the amp.

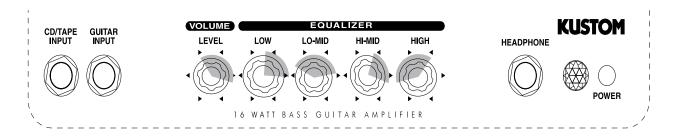
Back Panel - this is a 2 conductor 1/4" speaker output jack. This will disconnect the internal speaker and allow an external speaker cabinet to be employed. Rating is 8 ohms.

Suggested Settings

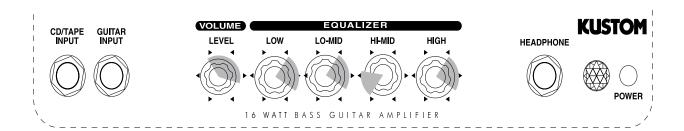
(These settings are general starting points. They are designed to get you close to the sound you are looking for. If the control is not shown, then it doesn't apply to this particular sound.)



Traditional Electric Bass Setting - in this setting the amplifier will deliver a standard electric bass sound. Whether you are playing rock, country, blues or gospel, this setting will get you close. Because of the Active E.Q., you will be able to dial in your preferences from here. If you play with a pick and want less top end attack on the notes, roll off a bit of the High control. If it's deeper bottom your looking for, add more low and low mid. The key is to experiment to achieve your own personal sound.



Funk "Slap" Sounds - this style of music needs a good strong attack sound with lots of top end. Usually a hollowed out middle will produce the extra top end necessary for the punch needed for this style of music. If you are using a more thumb style, a bit more low end and volume might be needed for your particular style of playing. Or less if you really hit it hard. Even though this is a practice or rehearsal level amplifier, it will deliver the punch and clarity that you require. Remember to try this amp with an additional speaker plugged in. You'll be nicely surprised.



Alternative Style - this setting is designed for a upper end punch and edge that will cut through most any sound. This style will work well with pick or fingers and will add a touch of distortion to the sound as well. Make sure your instrument's volume control is up all the way. Since you are adding volume, you need to be careful with the actual amount of e.q., you use as it also can add distortion to the sound. Also, you may want to use a compressor pedal in the signal chain before the amp to give it a smoother sound but still "edgy". As in all the settings above, it is strictly a matter of personal taste in a achieving the sound you are looking for.....experiment.